

**Listing of the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A prosthetic intervertebral disc comprising:

- a) a central core material having an upper surface, a lower surface and a sidewall therebetween, and
- b) a non-resorbable one piece outer shell having an inner surface surrounding the central core and contacting the upper surface, the lower surface and the sidewall of the core, wherein at least one of the upper and lower surfaces of the outer shell comprises a recess for receiving a pin, and
- c) a pin received in the recess of the outer shell.

wherein the outer shell has an upper wall having an upper surface having a dry coefficient of friction against bone of at least 0.5.

2. (Original) The disc of claim 1 wherein the non-resorbable shell has an outer surface, the outer surface having an i) upper surface adapted to contact a natural upper vertebral endplate and ii) a lower surface adapted to contact a natural lower vertebral endplate.

3. (Original) The disc of claim 2 wherein the upper surface of the shell is convex, and the lower surface of the shell is flat or concave.

4. (Original) The disc of claim 2 wherein the upper and lower surfaces of the shell are convex.

5. (Previously Presented) The disc of claim 1 wherein the outer shell further comprises an upper wall having a thickness, and a side wall having a thickness, wherein the thickness of the upper wall is lower than the thickness of the side wall.

6. (Previously Presented) The disc of claim 5 wherein the thickness of the sidewall approximates a thickness of the annulus fibrosus.
7. (Original) The disc of claim 1 further comprising:
  - c) an intermediate layer between the central core and the outer shell.
8. (Original) The disc of claim 1 having no intermediate layer between the core and the outer shell.
9. (Original) The disc of claim 1 further comprises:
  - c) a radio-opaque marker disposed within the outer shell or core.
10. (cancelled)
11. (Currently amended) The disc of claim 1 wherein the outer shell has a high first hardness and the core has a lower second hardness, and wherein the first hardness is larger than the second hardness.
12. (Cancelled)
13. (Previously Presented) The disc of claim 1 wherein the upper surface of the upper wall of the outer shell has a surface roughness  $R_{max}$  of no more than 0.15mm.
14. (Previously Presented) The disc of claim 1 wherein the upper surface of the shell is convex, and the lower surface of the shell is flat or concave.
15. (Previously Presented) The disc of claim 1 wherein the upper and lower surfaces of the shell are convex.
16. (Previously Presented) The disc of claim 1 wherein the outer shell comprises silicone.

17. (Previously Presented) The disc of claim 1 wherein the outer shell further comprises a lower wall having a lower surface, the lower surface having a dry coefficient of friction against bone of at least 0.5.

18. (Cancelled)

19. (Currently Amended) The disc of claim 1 wherein the lower surface of the outer shell comprises a recess for receiving a pin.

20. (Currently Amended) The disc of claim 1 wherein at least one of the upper and lower surfaces of the shell is flat.

21. (Cancelled)

22. (Previously Presented) The disc of claim 1 wherein the central core and the outer shell are made of different grades of the same material.

23. (Previously Presented) The disc of claim 22 wherein the same material is silicone.

24. (Currently Amended) The disc of claim 1 wherein the central core has a first lower hardness and the sidewall of the outer shell has a higher second hardness, and wherein the first hardness is smaller than the second hardness.

25.(cancelled)

26.(cancelled)

27.(cancelled)

28. (Currently Amended) The disc of claim 1 wherein the outer shell further comprises an upper wall having a first lower thickness, and a side wall having a second larger thickness, and wherein the first thickness is smaller than the second thickness.

29. (Currently Amended) The disc of claim 1 wherein the ~~larger~~ second thickness of the sidewall approximates a thickness of the annulus fibrosus.